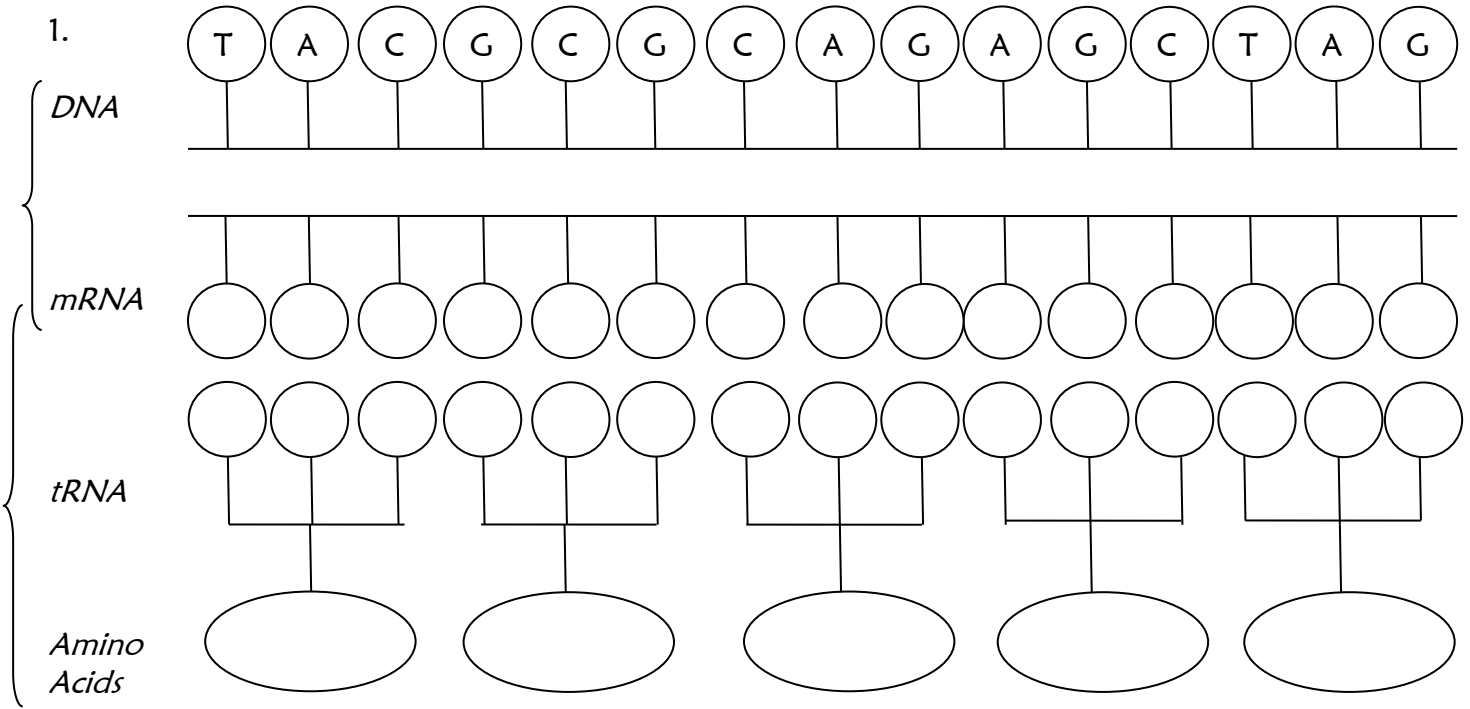# Protein Synthesis Worksheet

Name: _____ Date: _____ Period _____

Directions:
1. Use the DNA code to create your mRNA code.
2. Use the mRNA code to create your tRNA code.
3. Use the mRNA code and the Genetic Code to determine your amino acids.
4. Answer any questions by **circling** the correct answer.

1.

DNA: T A C G C G C A G A G C T A G

mRNA

tRNA

Amino Acids

2. mRNA is made during (transcription/translation).

3. mRNA is made in the (cytoplasm/nucleus).

4.

DNA: A C A A A A C G G G A G T G A

mRNA
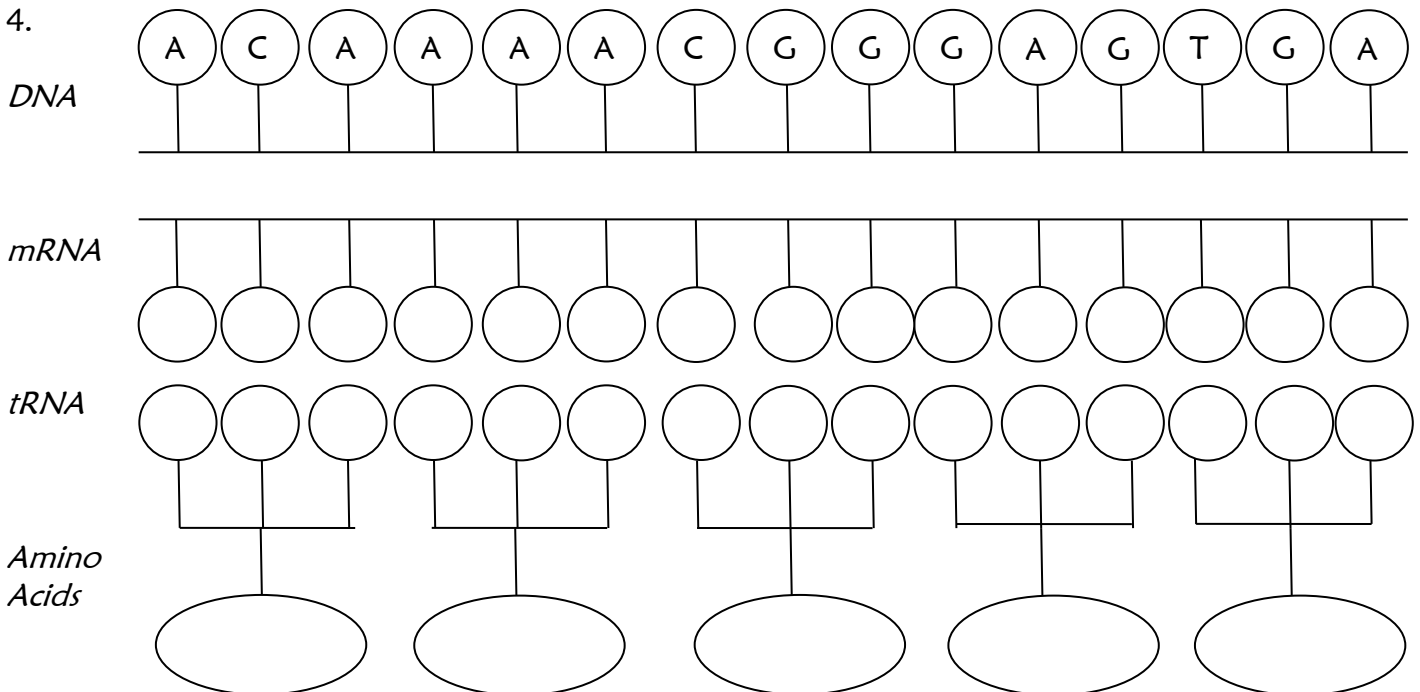
tRNA

Amino Acids

5. DNA is located in the (nucleus/cytoplasm)

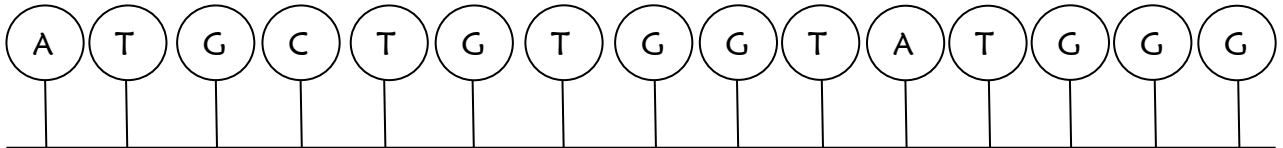6. (mRNA/rRNA) is used to carry the genetic code from DNA to the ribosomes.

7. (tRNA/rRNA) makes up the ribosome.

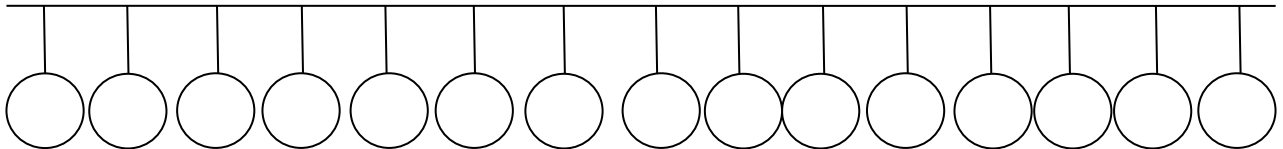8. (DNA/RNA) uses uracil instead of thymine.
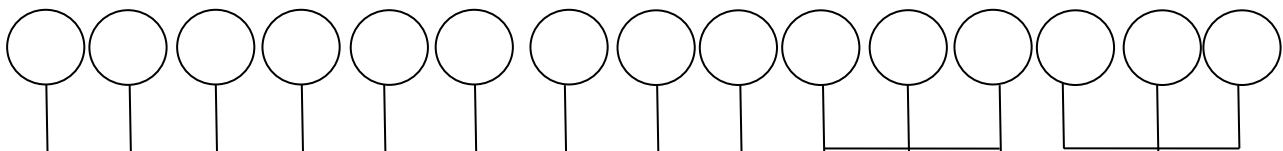
9. (RNA/amino) acids make up a protein.

10.

DNA

A T G C T G T G G T A T G G G

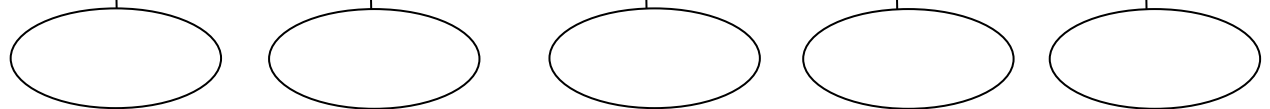mRNA

tRNA

Amino
Acids

11. Transcription takes place in the (nucleus/cytoplasm).

12. tRNA is used in (translation/transcription).

13. tRNA uses (anticodons/codons) to match to the mRNA.

14. Proteins are made at the (nucleus/ribosome).

15. (tRNA/mRNA) attaches the amino acids into a chain.

16. tRNA is found in the (nucleus/cytoplasm).

17. (Translation/Transcription) converts mRNA into a protein.

18. Translation takes place in the (cytoplasm/nucleus).

19. (DNA/RNA) can leave the nucleus.

20. (Translation/Transcription) converts DNA into mRNA.